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Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

Federal Communications Commission
Office of Secretary

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In the Matter of)
)
Advanced Television Systems and) MM Docket No. 87-268
Their Impact upon the Existing)
Television Broadcast Service)

To: The Commission

PETITION FOR CLARIFICATION AND PARTIAL RECONSIDERATION

National Broadcasting Company, Inc. ("NBC"), on behalf of its owned and operated television stations, and pursuant to Section 1.429 of the Commission's Rules, hereby petitions for clarification and partial reconsideration of the Fifth and Sixth Reports and Orders on Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, released April 21, 1997.¹

NBC has been an active participant in the efforts of the broadcast industry and the FCC to develop rules and standards for digital television service to ensure the most rapid and efficient means for the industry's transition to DTV. Assigning digital channels to more than 1600 television stations is a monumental task and we recognize the impossibility of arriving at a Table that is "perfect" and one which fully satisfies the specific needs of each television station. The Table of Allotments and Assignments adopted in the Sixth Report and Order (the "Table") goes a long way towards effectively balancing these numerous competing needs and interests. However, as fully set forth in the Petition for Partial Reconsideration and Clarification of the Fifth and Sixth Reports and Orders submitted by the Association for Maximum Service Television, Inc., the Broadcasters Caucus and other Broadcasters filed today ("Broadcasters' Petition")², there are certain problems, inconsistencies and uncertainties in the Table which must be resolved before DTV can be effectively implemented. NBC fully supports the Broadcasters' proposals to resolve these issues as expeditiously as possible in the manner set forth in the Broadcasters' Petition.

¹62 Fed. Reg. 26684 (May 14, 1997); 62 Fed. Reg. 26966 (May 16, 1997).

² NBC is a signatory to that Petition.

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NBC has conducted its own engineering analysis of the Table and has identified specific concerns, set forth below, with regard to the assignments for our owned and operated stations. Our analysis has been hampered, however, by the absence of OET Bulletin 69, which is described in the Sixth Report and Order as a technical reference which explains the FCC process for predicting service and interference. The results of our analysis may need to be modified after we have had an opportunity to review OET Bulletin 69.

I. The Assignments for the Southern California Region Require Reexamination

A. KNBC, Los Angeles, CA

KNBC in Los Angeles, currently operates on NTSC Channel 4, and has been assigned DTV channel 36, with ERP of 680.9 kW at the existing antenna radiation center HAAT of 984 meters. The FCC predicts only 84.3% replication of the stations' current NTSC service area, which represents a loss of service to over 430,000 people. In addition, the service loss could even be greater, as it appears that in calculating the DTV service area for KNBC, the FCC employed a hypothetical directional antenna pattern even though the station's NTSC operation is nondirectional. The FCC's antenna pattern assumes almost 3 dB or one-half power suppression in the direction of Los Angeles proper and along the coastline to the southeast. We expect that OET Bulletin 69 will provide us with the necessary information to determine whether the potential DTV service area of KNBC is correctly represented.

NBC is greatly troubled by the proposed loss of service to a significant portion of its viewers in the digital environment. We recognize the difficulty in achieving complete replication of a lower-band VHF station, like Channel 4, by a UHF station due to the terrain in the Los Angeles area. We believe, however, that there are possible alternatives to the current assignments for this market, and we pledge to cooperate with the Broadcasters Caucus efforts to coordinate possible assignment changes in this region and arrive at a solution that does not jeopardize service to hundreds of thousands of viewers.

B. KNSD, San Diego, CA

KNSD currently operates on NTSC Channel 39, with a maximum ERP of 2510 kW. It has been assigned DTV Channel 40, but with a maximum power of only 89.3 kW. It is not known whether the station will be able to fully replicate its NTSC service area at such low power, given the terrain in the region, as well as the way in which DTV channels have been packed into this region. NBC pledges to work with the Broadcasters Caucus to propose changes to the Table which would help alleviate the congestion in this area and would give KNSD the flexibility needed to increase power if required to achieve replication.

II. Need for Clarification of Protected Service Area

As described in the Broadcasters' Petition, the new rules adopted in the Sixth Report and Order fail to define the protected service area of the new DTV stations. It is possible that clarification will be provided in the form of OET Bulletin 69. Without this clarification, it is difficult for NBC to determine the scope of potential interference with respect to two stations.

WNBC, New York, New York, has been assigned DTV channel 28. The FCC assigned an adjacent channel DTV operation on channel 29 at West Milford, New Jersey for station WFME-TV. The assignment violates the FCC spacing requirements for new adjacent DTV assignments by 40.4 kilometers. Although the FCC methodology predicts that there will be 55 square kilometers of interference to the WNBC DTV operation, it is possible that the interference will be greater, especially as the signal approaches the WFME-TV DTV transmitter site. Clarification is needed from the FCC to determine what is considered to be the protected service area of the DTV operation on channel 28.

Similarly, WCAU, Philadelphia, PA, has been assigned DTV channel 67. An adjacent channel assignment was made in Vineland, New Jersey on channel 66 for WHSP-TV. This assignment violates the FCC spacing requirements by 40.5 km. We do not have the necessary information from the FCC to determine the protected service area of DTV channel 67 and we are concerned that there may be interference to the station, especially in the vicinity of the WHSP-TV transmitter site.

In addition, Section 73.662(e) of the FCC's rules defines the DTV service area as the 41 dBuF(50,90) contour, which is stated to be the value at which DTV service is limited by noise. However, for channel 67, this value is 43 dBu. While dipole corrections for receiving antenna gain have been applied elsewhere in the DTV allocation process, they have not been applied to the determination of WCAU's DTV service area. We anticipate that the release of OET Bulletin No. 69 may provide the required definition.

III. The Table Should Be Modified Where Possible to Reduce Interference to Stations from Adjacent Channel Assignments

In making the DTV assignments, the FCC attempted to minimize the interference that new DTV stations would cause to existing NTSC operations. In certain instances, as described below, NBC believes that the amount of interference caused to the NTSC station could be reduced or even eliminated by a change in assignment for the DTV facility. NBC intends to work with the Broadcasters' Caucus to resolve these issues.

The FCC calculations of service and interference predict that WRC-TV, Washington, D.C., will receive interference to 3.3 percent of the population and 7 percent of the land area

within its NTSC Grade B contour. This represents new interference to over 200,000 people. All of the new interference is from a cochannel DTV assignment for WHP-TV, Harrisburg, Pennsylvania. None of the other stations in this market is expected to receive new interference to its NTSC station from new DTV stations. Assignment of another channel for WHP-TV would allow WRC-TV to retain its existing audience and maintain its competitive position during the transition .

The FCC predictions also indicate that new interference to the current NTSC service of NBC-owned WJAR in Providence, RI, will affect 3.0 percent of the population and 11.4 percent of the area within the station's existing Grade B contour. (The Institute for Telecommunications Sciences' computer model predicts interference to 5.2 percent of the NTSC interference free service area.) Nearly all of this interference is attributed to the cochannel DTV assignment for WTNH, New Haven, CT, at a distance of 147 kilometers from WJAR. This DTV assignment violates the FCC spacing requirement by 97.6 kilometers. A new DTV assignment for WTNH would allow WJAR to retain its existing audience during the transition.

IV. A New Channel Assignment in Miami May Be Necessary to Provide Service to the Entire Miami-Fort Lauderdale Market

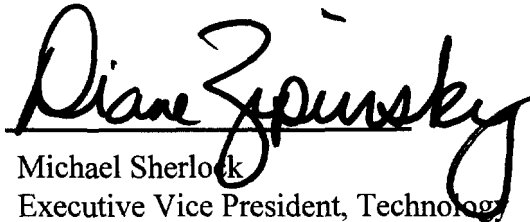
WTVJ, Miami, FL, operates on NTSC channel 6 at a transmitter site located south of the Miami urban area. Operation from this location is required because of a co-channel NTSC station located in Orlando, FL. WTVJ currently operates two translators, on Channel 58 in Hallendale, and Channel 19 in Sunrise in order to provide service to the entire Miami-Fort Lauderdale metropolitan area.

WTVJ was assigned DTV channel 30 with an ERP of 1000 kw. In order to provide service to its market, WTVJ intends to apply to move its antenna closer to the center of Miami. However, the DTV channel 30 assignment is first adjacent to NTSC station WFLX, West Palm Beach. Without OET Bulletin 69, we cannot determine whether our Channel 30 DTV facility can be moved to another location without causing increased interference to WFLX. If such a move cannot be made, NBC intends to apply for assignment of a new DTV channel which will permit it to move its antenna to a location closer to the center of Miami.

CONCLUSION

As set forth above, and in the Broadcasters' Petition, the Commission should clarify, revise and provide for limited exceptions to the decisions reflected in the Fifth and Sixth Reports and Orders in this proceeding.

Respectfully submitted,

A handwritten signature in black ink, reading "Diane Zipursky". The signature is written in a cursive, flowing style. The first name "Diane" is written with a large, looped 'D'. The last name "Zipursky" is written with a large, looped 'Z' and a long, sweeping tail that extends to the right.

Michael Sherlock
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